



IDEM Permit Guide

Air Construction Permits

Who May Need An Air Construction Permit or Approval

All new sources of air pollutant emissions are subject to New Source Review requirements. However, a new source may be exempt from any construction permitting requirement if its potential to emit regulated air pollutants are below the emission thresholds which would require it to register with IDEM as a source of air pollution. If the source is certain that its potential to emit falls below registration level thresholds, that source is not required to submit a registration application. Nonetheless, a source which submits an application and is determined to be exempt will be issued a letter of Exemption by IDEM.

On the other hand, if a source's potential to emit any regulated pollutant is within the applicable thresholds which requires registration, the source must register, and will be issued a Registration which includes operating conditions. A new source with a potential to emit any regulated air pollutant above registration level thresholds must obtain a New Source Construction Permit.

Types of Construction Permits

The Permitting Hierarchy

Like the other IDEM air permitting programs, permitting for new construction has a permit hierarchy, or series of permits regulating increasingly higher levels of potential to emit of the various regulated pollutants. The hierarchy (from lowest to highest) of permits for construction of a new sources is:

- Letter of Exemption
- Registration
 - New Source Construction Permit
 - New Source Construction Permit /FESOP
 - New Source Construction Permit /Title V Operation Permit
 - Federal Construction Permit (within the Prevention of Significant Deterioration [PSD] or Offset programs)

In addition, some new sources intending to operate under a Source Specific Operating Agreement (SSOA) may be subject to New Source Construction permit requirements.

Letter of Exemption

Sources whose potential to emit is less than the minimum thresholds (middle column) for all the pollutants listed in the registration thresholds table (below) are exempt from any construction permitting requirements. A source which submits an application (along with a \$100 filing fee) which demonstrates to IDEM, or from which IDEM may determine, that the potential to emit of the source is below all the registration thresholds will be provided with a letter of Exemption from IDEM. The letter verifies that there are no construction conditions to be met and also can serve in lieu of an operating permit, so long as the source does not engage in further construction to expand the source's potential to emit above registration levels or beyond.

Registrations

The table below displays the range of potential to emit thresholds for a Registration. Sources whose potential to emit is equal to or greater than the minimum threshold (middle column) of any one of the pollutants listed in the table, but also less than the maximum threshold (right-hand column) for all of the

pollutants listed in the table must obtain a Registration from IDEM.

On the other hand, sources whose potential to emit is equal to or greater than the maximum thresholds (right-hand column) for any one of the pollutants listed in the table must apply for a New Source Construction Permit.

Registration Thresholds Table

| Pollutants | Minimum Threshold (Potential to Emit Equal to, or greater than) in Tons/Year | Maximum Threshold (But less than) in Tons/Year |
|---|---|---|
| (VOCs) Volatile Organic Compounds for sources not required to use air pollution control equipment to comply with the VOC emission rules | 10 | 25 |
| (VOCs) Volatile Organic Compounds for sources that are required to use air pollution control equipment to comply with the VOC emission rules | 5 | 25 |
| (NOX) Nitrogen dioxide and oxides of nitrogen | 10 | 25 |
| (CO) Carbon monoxide | 25 | 100 |
| (SO ₂) Sulfur dioxide | 10 | 25 |
| Particulate Matter | 5 | 25 |
| (PM-10) Particulate matter less than 10 microns | 5 | 25 |
| Lead | 0.2 (400 pounds) | 5 |
| Fluorides | 5 | 25 |
| Hydrogen Sulfide | 5 | 25 |
| Total Reduced Sulfur | 5 | 25 |
| Reduced Sulfur Compounds | 5 | 25 |

New Source Construction Permits

Any new source whose potential to emit any regulated pollutant is above the maximum threshold for a Registration – potential to emit of greater than 100 tons per year (TPY) for carbon monoxide, 5 TPY for lead, or 25 TPY for any of the other regulated pollutants (see right-hand column of the Registration Thresholds Table, above) must obtain a New Source Construction Permit prior to the placement or hook-up of any emission unit or piece of pollution control equipment. In addition, any new source with a potential to emit lead or lead compounds measured as elemental lead at equal to or greater than 1 TPY if the source is a primary or secondary lead smelter, a primary copper smelter, a lead gasoline additive plant, a lead-acid storage battery manufacturing plant that produces 2,000 or more batteries per day also must obtain a New Source Construction Permit. Similarly, new chromium electroplating facilities and medical waste incinerators also must apply for a New Source Construction Permit.

Those sources required to obtain a New Source Construction Permit also will automatically be transitioned by IDEM into an operating permit program. When applying for the New Source Construction www.IN.gov/idem/guides/permit/air/airconstruction.html

Permit, sources requesting to operate under a Minor Source Operating Permit (MSOP), will be issued a New Source Construction Permit/MSOP. However, if the source's potential to emit any regulated air pollutant is above "major" Title V thresholds it must either

- 1) agree to accept limits on its potential to emit (such as limitations on solvent or fuel usage, raw material put through, hours of operation, or by using particulate air pollution control devices) and request a New Source Construction Permit/Federally Enforceable State Operating Permit (FESOP),
- 2) request a New Source Construction Permit/Title V Operating Permit, or
- 3) request a New Source Construction Permit/MSOP with the understanding that it must apply for a Title V Operating Permit within one year of beginning operation.

Then, when the source is issued a New Source Construction Permit, its operating permit -- the record keeping and monitoring requirements as well as the conditions and requirements under which the emissions unit(s) and any pollution control equipment they will be using must be operated -- will automatically be included in that same document. Once construction has been completed, the source must file an Affidavit of Construction with IDEM which will, in turn, issue an operating permit validation letter. The newly constructed source will not be allowed to begin operations until that validation has been issued.

Federal Construction Permits

Construction projects that are deemed to be "major" may not receive a New Source Construction Permit, but are instead required to also meet federal New Source Review requirements. The federally imposed requirements differ, depending on whether the location of the proposed project is in "attainment" or "non-attainment" for the regulated pollutants that would be emitted. Sources which must obtain federal construction permits are always transitioned into the Title V Operating Permit Program.

Federal Emissions Offset Construction Permits

Within a nonattainment area, any proposed new source with the potential to emit 100 TPY or more of carbon monoxide (CO), oxides of nitrogen (NOX), sulfur dioxide (SO₂), volatile organic compounds (VOCs), or particulate matter and particulate matter smaller than 10 microns (PM and PM-10) is determined to be major. In a "serious ozone non-attainment area," the potential to emit 50 TPY of NOX or VOCs constitutes a major source, while in a "severe ozone non-attainment" area, such as Lake and Porter counties, the potential to emit 25 TPY of NOX or VOCs is enough to qualify a new source as major. The potential to emit 25 TPY, or more, of lead or 5 TPY, or more, of lead from specific sources - primary or secondary lead smelters, primary copper smelters, lead-gasoline additive plants, or lead acid storage battery manufacturing plants that produce 2,000 or more batteries a day - also can cause a new source in a non-attainment area to be classified as major.

The federal permitting requirements for such "major" new construction or modifications within a non-attainment area include the use of Lowest Achievable Emissions Rate and a greater than one-for-one offset of the same pollutant from an existing source to ensure reasonable further progress toward attainment of ambient air quality standards. Achieving these standards is extremely difficult. As a result, most applicants avoid proposing major construction or modifications within non-attainment areas.

Federal Prevention of Significant Deterioration Construction Permit

On the other hand, the federal permitting requirements within an attainment area provide for the prevention of significant deterioration (PSD) of existing air quality. Thus, the federal PSD program requires any major new source to install the Best Available Control Technology (BACT) and to perform air modeling and analysis to demonstrate that emissions remaining after application of BACT will not cause significant deterioration of existing air quality.

Under the federal PSD program, a "major" source is defined as one with the potential to emit 100 TPY of CO, NOX, SO₂, VOCs, or PM from one of 28 specific emission source categories. Outside of those 28 categories, any source with the potential to emit 250 TPY or more of any of the same five pollutants, or 25 TPY of lead or 5 TPY of lead from specific sources - primary or secondary lead smelters, primary copper smelters, lead-gasoline additive plants, or lead acid storage battery manufacturing plants that produce 2,000 or more batteries a day - is also determined to be a "major" source under the PSD program, and

must conform to the previously mentioned federal permitting requirements.

The Differing Definitions of State and Federal Construction

State Construction

For purposes of state New Source Review (for Registrations or any level of New Source Construction Permits) the applicant may install building supports and foundations, lay underground piping, erect storage structures, dismantle existing equipment, order equipment or control devices, initiate off-site fabrication or temporarily store equipment on-site other than where the permanent installation will occur. However, applicants may not fabricate, erect, or install air pollution control equipment on the facility or at that location intended for the use of that equipment until a permit has been issued (see 326 IAC 1-2-21).

Federal Construction

However, the federal New Source Review program (regarding offsets or PSD) is much more stringent. It only allows for limited activities on-site prior to commencement of construction. Activities allowed include: planning, ordering of equipment and materials, site-clearing, grading and on-site storage of equipment and materials. All of the above activities are at the owners risk. Activities of a permanent nature are prohibited. These include: installation of building supports and foundations, paving, laying underground pipe, and construction of permanent storage structures. Any construction activities of a permanent nature which take place prior to the issuance of the permit will result in an enforcement action (see 326 IAC 2-2-1 and 326 IAC 2-3-1(d)).

Some of the things a new source should do to comply with the requirements of New Source Review include (but are not limited to):

- Thoroughly complete the air construction permit application, taking care to not omit any information that is needed for IDEM staff to calculate the potential to emit for the source (Insufficient information for determining the level of permitting required can prolong the permitting process),
- Submit 3 copies of the application to IDEM and also, within 10 days of the submission of the application, place a copy on file at the public library in the county in which the permitted activity is to take place,
- Submit the application with a \$100 filing fee (If a higher level of permitting is required, you will be billed for additional permit fees once the level of permitting has been determined),
- Submit any additional permit fees (once additional fees have been billed, the permit accountability clock stops, and the permit cannot be issued, until the balance of any fees is paid),
- Take care not to exceed the limitations on construction (listed above under "The Differing Definitions of State and Federal Construction") prior to obtaining a registration or permit approval,
- Once a construction permit is issued, the permittee must begin construction within 18 months, and
- All sources building under a New Source Construction Permit must submit an Affidavit of Construction upon the completion of construction, after which IDEM transitions the source into an operating permit program.

What to Expect

IDEM has 60 days to process a registration, while New Source Construction Permits will be processed within 120 days, and federal construction permits within 270 days. Federal construction permits must be reviewed by U.S. EPA prior to issuance. If IDEM needs any additional information to process the application, it will contact the applicant by mail or fax with a request for additional information, and any time which passes while IDEM is awaiting a response will not be counted against IDEM's allotted permit processing time frames.

Letters of Exemption and Registrations do not require a public notice period. On the other hand, all draft permits must be made available for a 30-day public comment period. The applicant or the public also may

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request a hearing. An additional 45 days is added to the time frame if IDEM conducts a public hearing on a construction permit application.

Additional fees will be assessed and billed once IDEM has made a final determination as to the level of permitting that will be required. The range of fees includes:

| Range of Fees for Air Construction Permits (For new construction or source modification) | |
|---|-----------------------|
| Filing Fee ¹ | \$100 |
| Registration | \$500 |
| New Source Construction Permit | \$3,500 ¹ |
| Federal Construction Permit | \$6,000 ¹ |
| Air Quality Analysis (if required, for Federal Permit) | \$3,500 |
| Air Quality Analysis (if requested by the applicant ²) | \$6,000 per pollutant |
| Control Technology Analysis Fees for BACT (Best Available Control Technology) or LAER (Lowest Achievable Emissions Rate) for: | |
| 2 to 5 Analysis | \$3,000 |
| 6 to 10 Analysis | \$6,000 |
| More than 10 Analysis | \$10,000 |
| Per review of NESHAPs (National Emissions Standards for Hazardous Air Pollutants) | \$500 |
| Per review for BACT or MACT (Maximum Achievable Control Technology) for Volatile Organic Compounds (if required) | \$600 |
| Per Public Hearing | \$500 |
| New Source Performance Standard Review | \$500 |
| ¹ The \$100 Filing Fee is credited toward these final fee totals only. | |
| ² Commissioner may deny request for such analysis. | |

For Additional Information

To obtain additional information regarding technical, general, or permit specific questions about the air permitting program, contact the IDEM Office of Air Quality Permit Reviewer of the Day:

Permit Reviewer of the Day
IDEM Office of Air Quality
Phone: (317) 233-0178
E-mail: Use this online form or e-mail at OAMPROD@dem.state.in.us

You may also contact one of the IDEM-authorized local air offices. For more information, consult the state rules on air construction permitting and the website of the Office of Air Quality and the Office of Air Quality Permits page.

Another helpful, and much more detailed source of information than this document, is: Air: An Indiana Air Permitting Guide; New Source Review and Operating Permits, by Marcia Oddi, 266 pages, Published by the Indiana Chamber of Commerce in partnership with IDEM, 1998. ISBN 1-883698-18-9. To obtain a copy, contact IDEM at the number listed above. (However, it is important to note that since the time of this publication, the permitting rules have been revised; therefore some of the information in the "Air: An Indiana Air Permitting Guide" may have been affected.)

www.IN.gov/idem/guides/permit/air/airconstruction.html

If you are looking for the status of permits under review or issued permits please visit the EPA Indiana Permit Tracking System or the OAQ Air Permits Online websites.

Disclaimer

This permit guide is intended to provide background information which should be useful in planning for a particular project that may require an environmental permit. It does not substitute for consultation with the appropriate regulatory agency and/or the appropriate rules or statute.